Washington State Department of Health Communicable Disease Epidemiology Influenza Update

2009 CDC Week 33 (8/16–8/22)

Please note that all data are preliminary and may change as more reports are received.

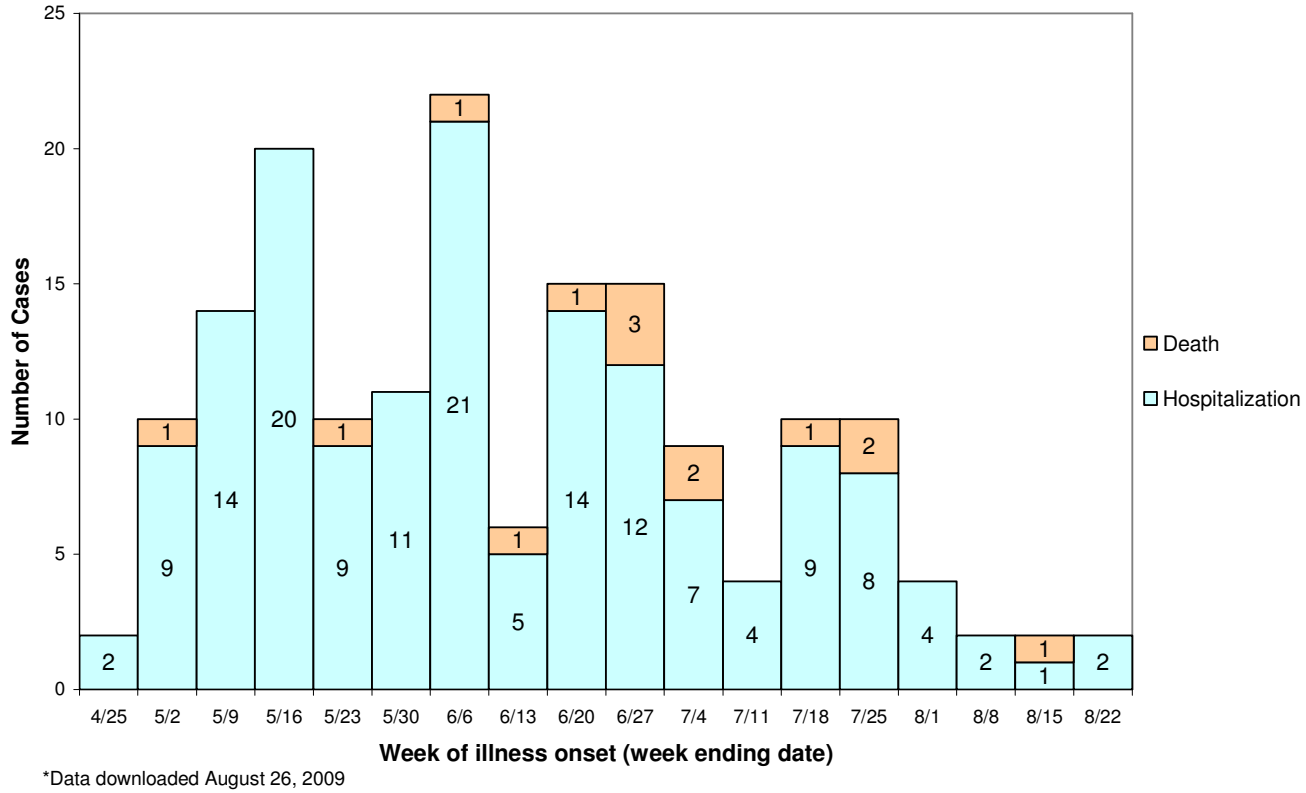
Quick Notes:

- During April 19 through August 26, 2009, the Washington State Department of Health received reports of 154 hospitalized and 14 deceased persons confirmed to be infected with pandemic H1N1 influenza virus. Of the 14 deaths known to be due to pandemic H1N1 influenza, two have occurred in pregnant women.
- Nationally, 99% of all subtyped influenza A viruses being reported to CDC were pandemic H1N1 viruses.
- Among sentinel providers in Washington, the proportion of patient visits for influenza-like illness is lower than the HHS-10 rate for this week; this is the eighth week that Washington's rate has been lower than the regional rate.
- The influenza activity in Washington was classified as local.

Pandemic H1N1 Influenza Virus Data

Currently, hospitals and healthcare providers are required to report hospitalized and deceased persons with confirmed pandemic H1N1 influenza to local health jurisdictions, who in turn, report to the Washington State Department of Health (DOH). During April 19 through August 26, 2009, DOH received reports of 154 hospitalized and 14 deceased persons confirmed to be infected with pandemic H1N1 influenza virus. These patients are plotted by week of onset in the graph below. Currently, the number of severe pandemic H1N1 influenza cases is at the lowest level since the outbreak started.

Number of hospitalized (N=154) and deceased (N=14) persons with confirmed infections due to pandemic H1N1 influenza virus in Washington



*Data downloaded August 26, 2009

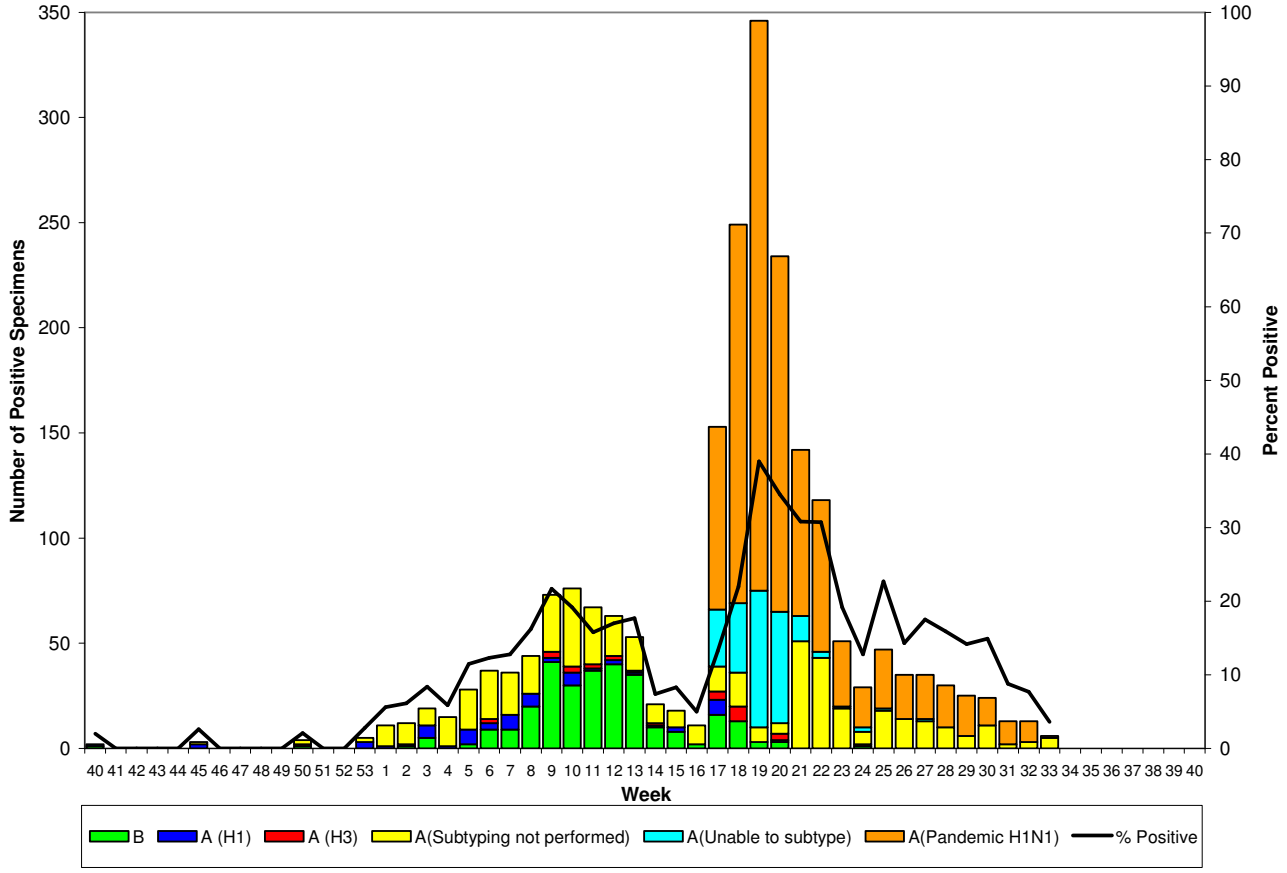
Laboratory Data

Three laboratories, the Washington State Public Health Laboratories, the Seattle & King County Public Health Laboratory and the University of Washington/Children's Hospital Laboratory, participate in the World Health Organization/National Respiratory and Enteric Virus Surveillance System (WHO/NREVSS).

During CDC Week 33, one of these three laboratories tested 168 specimens; of these, 6 (3.6%) were positive for influenza A virus (1 pandemic H1N1; 5 unsubtyped). Since the beginning of the 2008–09 influenza season, 2148 specimens tested by the three Washington laboratories have been positive for influenza. These data are in the following table and figure.

Washington Influenza Isolates – Weekly & 2008-09 Cumulative

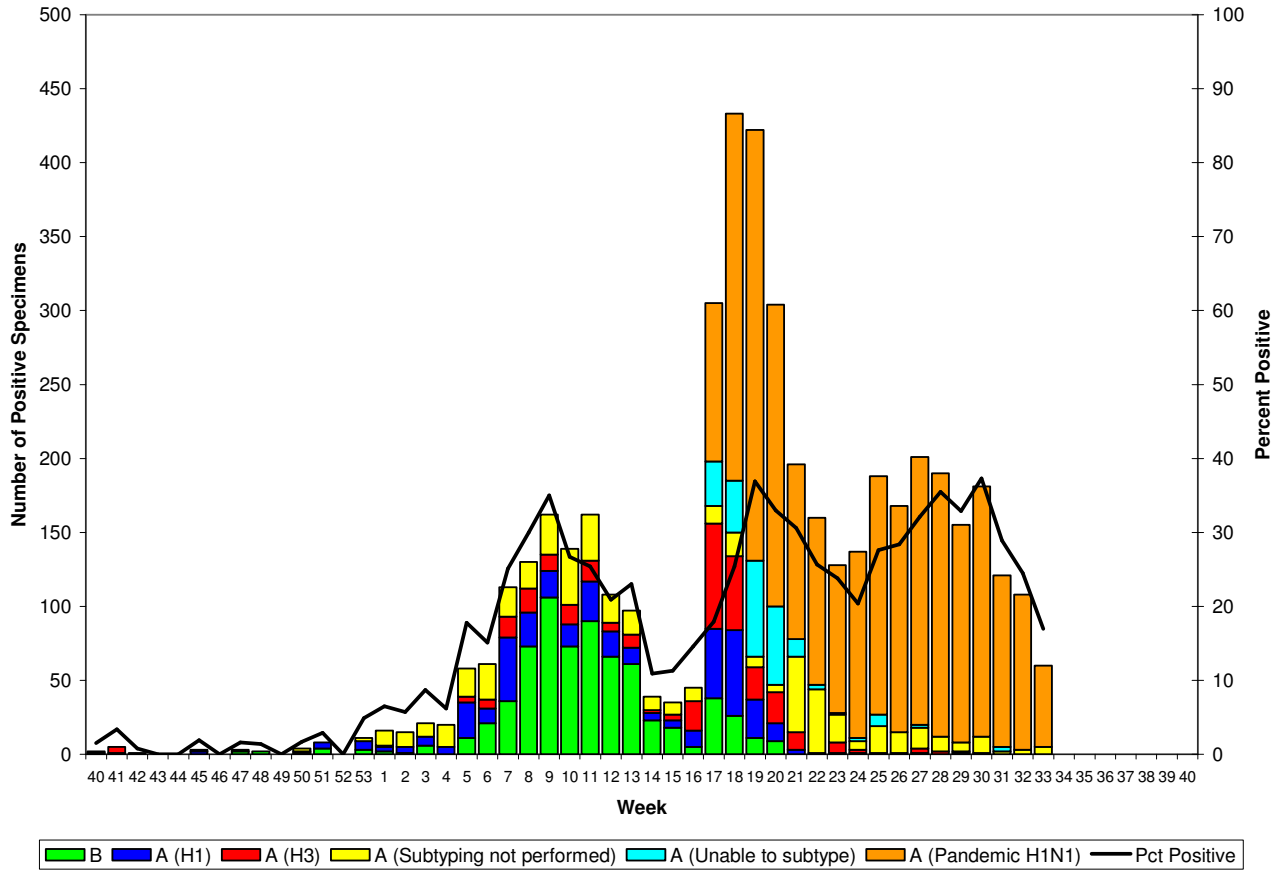
Time Period	No. Labs Reporting	A(H1)	A (Pandemic H1N1)	A (H3)	A (Unable to subtype)	A (Subtyping not performed)	B	Total Influenza	Total # Tested	% Influenza Positive
Week 31	3	0	11	0	0	2	0	13	147	8.8
Week 32	2	0	10	0	0	3	0	13	168	7.7
Week 33	1	0	1	0	0	5	0	6	168	3.6
Cumulative	--	61	1052	30	198	520	287	2148	13318	16.1



Of 353 specimens tested at three HHS Region 10 WHO/NREVSS collaborating laboratories during CDC Week 33, 60 (17.0%) were positive for influenza A virus (55 pandemic H1N1; 5 unsubtyped). These data are in the following table and figure.

HHS Region 10 Influenza Isolates – Weekly & 2008–09 Cumulative

Time Period	No. Labs Reporting	A(H1)	A (Pandemic H1N1)	A (H3)	A (Unable to subtype)	A (Subtyping not performed)	B	Total Influenza	Total # Tested	% Influenza Positive
Week 31	6	0	116	0	3	2	0	121	419	28.9
Week 32	6	0	105	0	0	3	0	108	440	24.5
Week 33	3	0	55	0	0	5	0	60	353	17.0
Cumulative	--	390	2572	321	214	529	691	4717	21309	3.2



The pandemic H1N1 viruses analyzed by CDC remain similar to the viruses chosen for the 2009 H1N1 vaccine, and remain susceptible to antiviral drugs (oseltamivir and zanamivir) with rare exception.

Influenza-like Illness Data

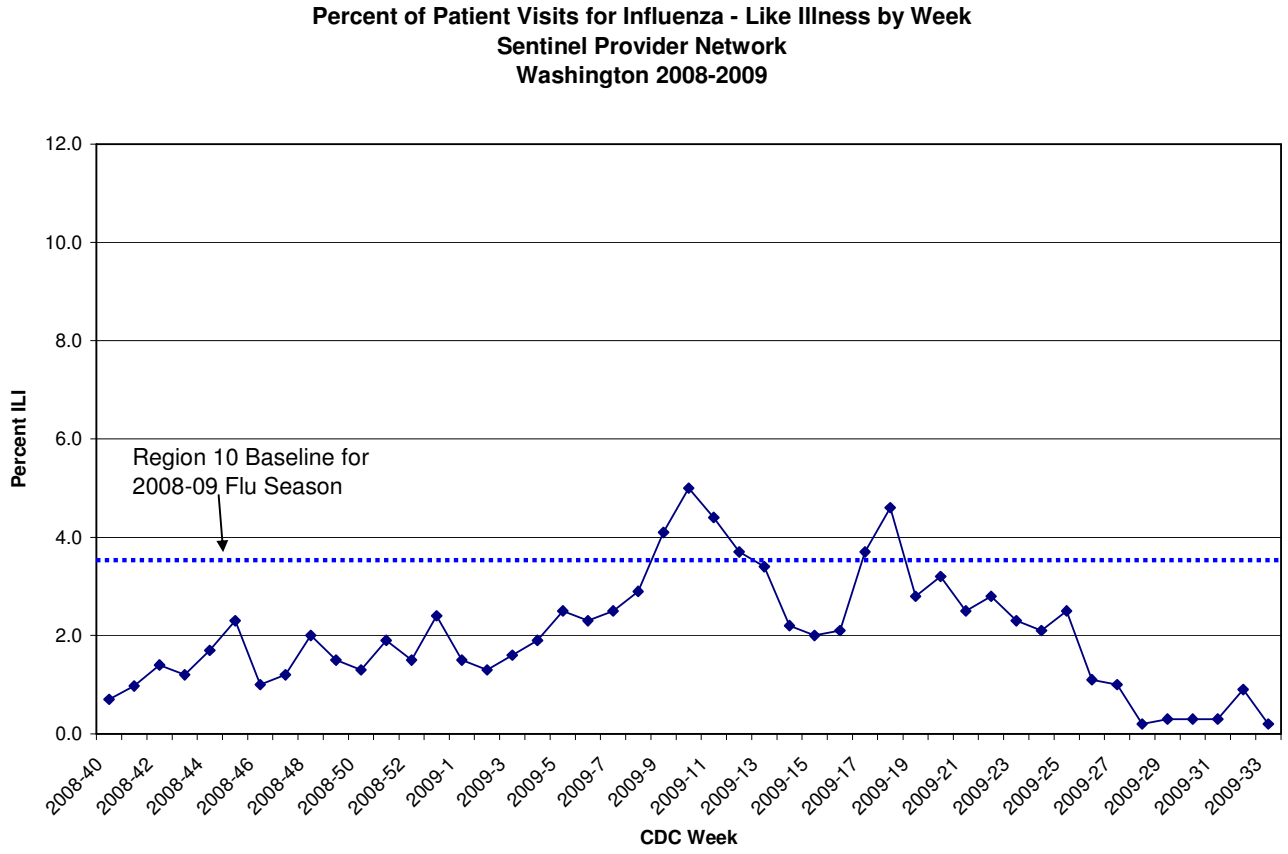
Outpatient Influenza-like Illness Surveillance Network (ILINet) Data

During CDC Week 33, four sentinel providers in Washington reported data to CDC. Of 1128 patient visits, 2 patients (0.2%) met the case definition for influenza-like illness (ILI; defined as fever ≥ 100° F or 37.8° C [oral or equivalent] AND cough and/or sore throat [in the absence of a known cause other

than influenza]). This is lower than last week when Washington sentinel providers reported that 0.9% of patients met the ILI case definition (see table and chart below).

Washington Sentinel Provider ILI Data

CDC Week	No. of Sentinel Providers	Age 0-4	Age 5-24	Age 25-64	Age over 64	Total ILI	Total Patients	% ILI
31 (2009)	10	2	1	1	0	4	1594	0.3
32 (2009)	9	10	3	1	0	14	1618	0.9
33 (2009)	4	0	1	1	0	2	1128	0.2



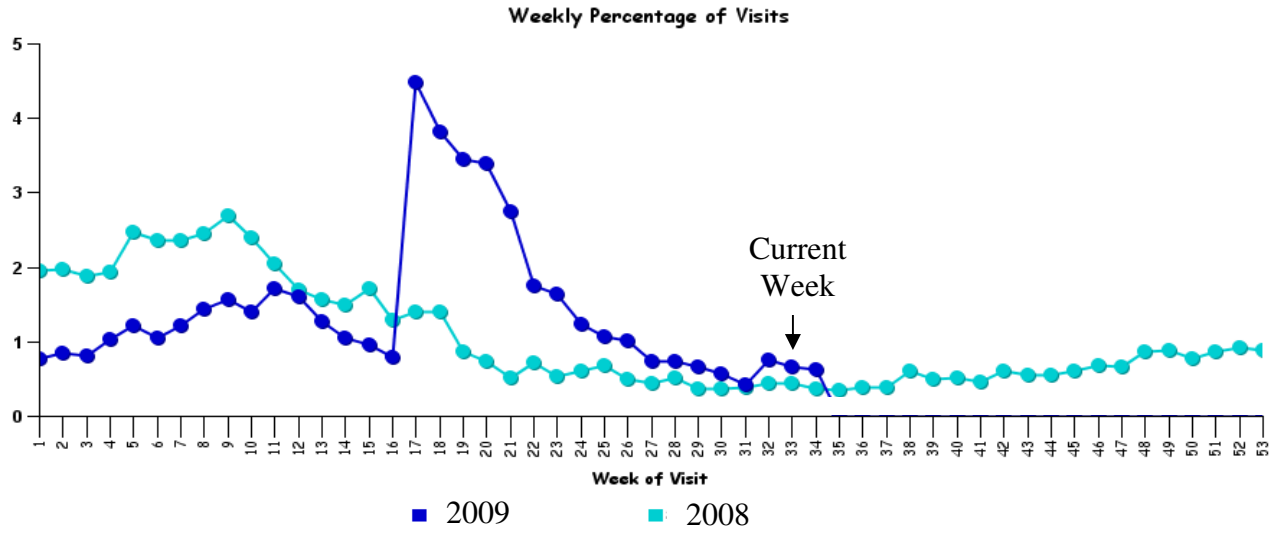
For this reporting week, the proportion of Washington patients with ILI was lower than the proportion reported in the Health and Human Services (HHS) Region 10 (Alaska, Idaho, Oregon, and Washington) as a whole which was 2.7% (see table below).

HHS Region 10 Sentinel Provider ILI Data

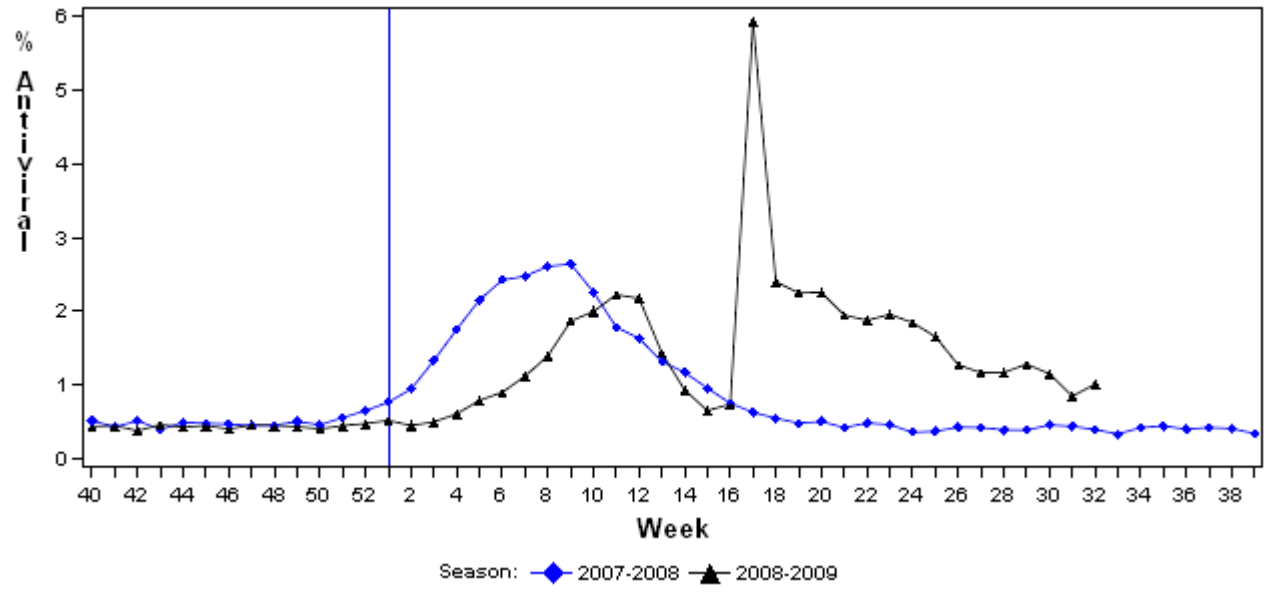
CDC Week	# Reporting	Age 0-4	Age 5-24	Age 25-64	Age over 64	Total ILI	Total Patients	% ILI
31 (2009)	25	12	15	26	0	53	4812	1.1
32 (2009)	21	25	25	32	3	85	4201	2.0
33 (2009)	14	10	44	37	1	92	3374	2.7

Syndromic Surveillance Data

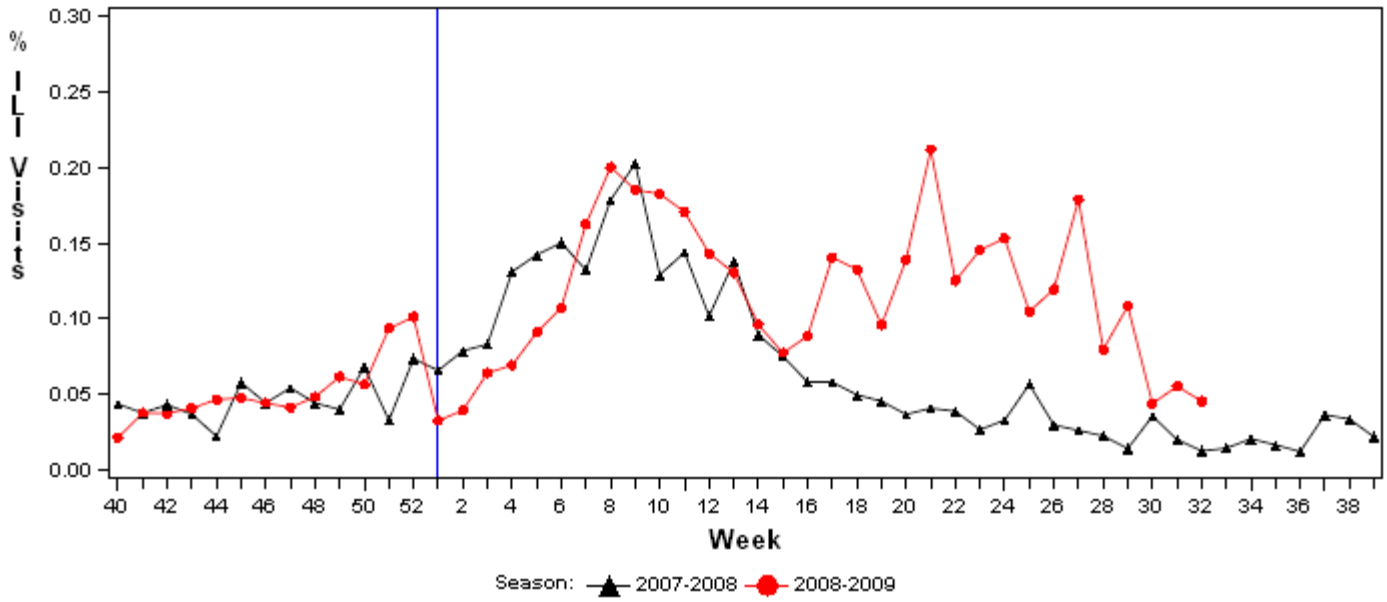
ESSENCE (Early Notification of Community-based Epidemics) WA: This syndromic surveillance system collects data from 22 emergency departments in King and Pierce counties. The following graph shows the proportion of emergency department visits between 2006 and 2009, by CDC week, that had a syndrome of influenza-like-illness. A syndrome of ILI is derived from the chief complaint and is defined as "influenza" OR fever with cough or sore throat. For week 33, emergency departments in King and Pierce counties reported 216 ILI visits (0.67%) out of 32,401 total patient visits.



BioSense Antiviral Prescriptions Data: Data about anti-infective prescriptions from over 500 pharmacies in Washington are collected by BioSense (a CDC maintained syndromic surveillance system) and plotted over time. The graph below reflects the ratio of influenza antiviral drug prescriptions (amantadine, rimantadine, oseltamivir, and zanamivir) to all anti-infective medication (e.g., antibiotics, antivirals, antifungals, antimycobacterials) prescriptions ordered. For CDC Week 32, 554 pharmacies in Washington reported 318 (1.0%) of 31,492 anti-infective prescriptions to be for influenza-specific antiviral medications.



BioSense Department of Defense (DoD)/Veterans Affairs (VA) Influenza Diagnoses: BioSense receives ambulatory care data from DoD outpatient medical treatment facilities and VA outpatient clinics. The influenza measure is based on ICD-9-CM codes for an individual visit using BioSense sub-syndromes in the following combination: influenza or (fever and [cough or URI]).
For week 32, there were 26 DoD/VA facilities in Washington reporting 24 ILI visits (0.05%) out of 52,822 total patient visits.



Mortality Data

Pneumonia and Influenza (P&I) Mortality
Three cities in Washington take part in the 122-Cities Mortality Reporting System. The data from the three Washington cities were not available for week 33. Nationally, in CDC Week 33, 6.1% of deaths were due to pneumonia or influenza.

Influenza-associated Pediatric Mortality
Nationally five pediatric influenza-associated deaths (none from Washington) were reported to CDC this week. These deaths were all associated with a pandemic influenza A (H1N1) virus infection. Please remember that influenza-associated deaths in children less than 18 years of age are reportable to your local health jurisdiction as a Rare Disease of Public Health Significance.